

1

1 GCTGTGGGAA CCTCTCCACG CGCACGAACCT CAGCCAAACGA TTTTCTGATAG ATTTTGTGGGA GTTTGACCAG AGATGCAAGG GGTGAAGGAG CGCTTCTCTAC
CGACACCCCTT GGAGAGGTGC GCGTGTCTGA GTCCGGTTGCT AAAGACTATC TAAAAACCCCT CAAACTGGTC TCTACGTTCC CCACCTCCTC CGAAAGGATG
MetGlnG1 yVallysGlu ArgPheLeuPro

-40

101 CGTTAGGGAA CTCTGGGGAC AGACGCCCCC AGACGCCCTGA TGGCCGAGGC AGGTGCGAC CCAGGACCCA GGACGGCGTC GGAACCATATA CCATGGCCCCG
GCAATCCCTT GAGACCCCTG TCTCGCGGG TCTCGCGGGT ACCTGGCTCCG TCCACGCTG GGTCTGGGT CCTTGGTAT GGTACCGGGC
-30 LeuglyAs nserGlyAsp ArgAlaProA rgrProProAs pGlyArgGly ArgValArgP roArgThrG1 nAspGlyVal GlyAsnHist hrMetAlaAarg

201 GATCCCCAAG ACCCTAAAGT TCGTCTGCTGT CATCGTCGCG GTCTCTGCTGC CAGTCTCTAGC TTACTCTGCC ACCACTGCCC GGACGAGGA AGTTCGCCAG
CTAGGGGTTC TGGGATTTCA AGCAGCAGCA GTAGCAGCGC CAGGACGACG GTGAGGATCG AATGAGACGG TGGTGACGGG CCGTCTCTCT TCAAGGGGTC
4 IleProLys ThrLeuLysP heValValVa lileValAla ValLeuLeup roValLeuAl aTyrSerAla ThrThrAlaa rGlnGlnGlu1 uValProGln

301 CAGACAGTGG CCCACAGCA ACAGAGGCAC AGCTTCAAGG GGGAGGAGTG TCCAGCAGGA TCTCATAGAT CAGAACATATC TGGAGCCTGT AACCCCGTGCA
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37 GlnThrVala laProGlnG1 nGlnArgHis SerPheLysG lyGluGluCy sProAlaGly serHisArgS erGluHisth rGlyAlaCys AsnProCysThr

401 CAGAGGCTGT GGATTACACC AACGCTTCCA ACAATGAACC TTCTTGCTTC CCATGTACAG TTTGTAAATC AGATCAAAAA CATAAAAGTT CCTGCACCAT
GTCTCCACA CCTAATGTGG TTGCGAAGGT TGTACTTGG AAGAACGAAG GGTACATGTC AAACATTTAG TCTAGTTTTT GTATTTTCAA GGACGTGGTA
71 GluglyVa laspTyrThr AsnAlaSerA sAsnGluPr oSerCysPhe ProCysThrV alCysLysse rAspGlnLys HisLysSers erCysThrMet

501 GACCAGAGAC ACAGTGTGTC AGTGTAAAGA AGGCACCTTC CGGAATGAAA ACTCCCCAGA GATGTGCCGG AAGTGTAGCA GGTGCCCTAG TGGGGAAGTC
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104 ThrArgAsp ThrValCysG lnCysLysG1 uGlyThrPhe ArgAsnGluA sSerProG1 uMetCysArg LysCysSera rGlyCysProse rGlyGluVal

601 CAAGTCAGTA ATTGTACGTC CTGGGATGAT ATCCAGTGTG TTGAAGAAAT TTGTCGCAAT GCCACTGTGG AAACCCCGAG TGCTGAAGAG ACAATGAACA
GTTCACTCAT TAAACATGCAG GACCTTACTA TAGGTACACAC AACTTCTTAA ACCACGGTTA CCGGTGACACC TTTTGGGTCTG ACGACTTCTC TGTACTTGT
137 GlnValserA sncysThrse rTrpAspAsp lIeGlnCysV alGluGluPh eGlyAlaAsn AlaThrValG luThrProAl luThrProAl ThrMetAsnThr

701 CCAGCCCGGG GACTCTTGCC CCAGCTGCTG AAGAGACAAT GAAACACCAGC CCAGGGGACTC CTGCCCCAGC TGCTGAAGAG ACAATGACCA CCAGCCCCGG
GGTCGGGGCC CTGAGGACGG GGTGACGAC TTCTCTGTTA CTGTGTGTCG GGTCCCTGAG GACGGGGTCG ACGACTTCTC TGTTACTGTT TGTTCGGGCC
171 SerProG1 yThrProAla ProAlaAlag luGluThrMe tAsnThrSer ProGlyThrP roAlaProAl aAlaGluGlu ThrMetThrT hrSerProGly

801 GACTCTGCC CCAGCTGCTG AAGAGACAAT GACCACCAGC CCGGGGACTC CTGCCCCAGC TGCTGAAGAG ACAATGACCA CCAGCCCCGG GACTCTGCTC
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204 ThrProAla PicalaAlag luGluThrMe tThrThrser ProGlyThrP roAlaProAl aAlaGluGlu ThrMetThrT hrSerProG1 yThrProAla

901 TCTTCTCATT ACCTCTCATG CACCATCTGA CACCATCTGA TTCTTAATTGT GCTTCTGATT GTGTTTGTGTTT GAAAGACTTC ACTGTGGAAG AAATTCCTTC
AGAAGAGTAA TGGAGAGTAC GTGGTAGCAT CCCTAGTATC AAGATTAAAC CGAAGACTAA CACAAACAAA CTTTCTGAAG TGACACCTTC TTTTAAAGGAAG
237 SerSerHist yrLeuserCy sThrIleVal GlyIleIlev alLeuIleVa lLeuLeuile ValPheVal

1001 CTTACCTGAA AGGTTCAAGT AGGCGCTGGC TGAGGGCGGG GGGCGCTGGA CACTCTCTGC CCTGCCTCCC TCTGCTGTGT TCCACAGAC AGAAACGCCT
GAATGGACTT TCCAAGTCCA TCCGGGACCG ACTCCCGGCC CCGCGGACCT GTGAGAGACG GGACGGAGGG AGACGACACA AGGCTGTCTG TCTTTGCGGA

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Apo2	1	-----MEQRGONAPAASGARKRHGPGPREARGARPGLRVPKTLVL
Apo2DcR	1	-----MARIPKTLKFVV
DR4	51	GRGALPTSMGQHGPSARARAGRAGPPEPAREASPRLRVHKTFFKFVVVGVL
Apo2	41	VVAAVLLILVSAESALITQODLAPQORAAPOOKTSSPSEGLCPGHHISED
Apo2DcR	13	VIVAVLLPVLAYSATTARQEEVPOOTVAPOQORHSFKGEFCFAGSHRSEH
DR4	101	LQVVPSSAATIK-----LHDQSIGTQOWEHSPLGELCPPGSHRSEH
		CRD1
Apo2	91	GRDCISCKYGQDYSTHWNDLLFCLRCTREDSCGEVELSPCTTTTRNTVCOCE
Apo2DcR	63	TGACNPCTEGVDYFNASNNEPSCFPCFVCKSDQKHKSCTMTIRDTVCOCK
DR4	142	PGACNRCTEGVGYNASNNLFACLPCTACKSDDEEERSPCTTTTRNTACOCK
		CRD2
Apo2	141	EGTFREEDSPERMCRKCRFGCPGPMVKVGDCTPWSDIECVHKE-----
Apo2DcR	113	EGTFERNENSPERMCRKCSR-CESGEVOVSNCTSWDDIQCV-EFGANATVE
DR4	192	PGTFERNENSAEMCRKCSFGCPGPMVKVGDCTPWSDIECVHKE-----
Apo2		-----
Apo2DcR	161	TPAAEETMNTSPGTPAPAAEETMNTSPGTPAPAAEETMTTSPGTPAPAAE
DR4		-----
Apo2	183	-----SGITIGVTVAAVVLLIVAVFV---
Apo2DcR	211	ETMTTSPGTPAPAAEETMTTSPGTPASSHYLSCTIVGIIVLIVLLIVFV
DR4	234	-----SNGHNIWVILVVTLLVPLIIVAV-LIVC
Apo2	203	CKSLLWKKVLPYLKGICSGGGGDPEFVDRSSQRPGEADNVLNEIVSILQP
DR4	262	CCIGSGCGGDEKCMMDRVCFWRLGLLGPGEADNAHNEILSNADSLSTFVS
Apo2	253	TQVPEQEMEVOEPAEPTGVNMLSPGESEHLLPAAEAERSORRRLLVPANE
DR4	312	----EQOMESQEPADITGVTVQSPGEAQCLLGPAAEAGSORRRLLVPANG
Apo2	303	GDPTETLRQCFDDFADLVPPDSWEPI*MRKLGLMDNEIKVAKAEAAGH--R
DR4	358	ADPTETLMLFFDKFANIVPPDSWDQMLRQDLTKNEIDVVVAGTAGP--G
Apo3/DR3	338	VMDAVPARRWKEFVRTLGREAEIEAVEVEI-GRF-R
TNFR1	322	VVENVPLRWKEFVRRGLSDHEIDRLLELON-GRCLR
CD95	220	IAGVHTLSQVKGFVRKNGVNEAKIDEIKNDN-VQDTA
Apo2	351	*DTLYTMLIKWVNKTGR-DASVHTLLDALETLCERLAKOKIEDHLLSSGKF
DR4	406	DALYAMLKMWVNKTGR-NASHTLLDALERMEERHAKKEIODLLVDGCKF
Apo3/DR3	374	DOQYEMLKRWRRQQP---AGLGAVYAALERMGLDGCVEDLRS
TNFR1	358	EAQYSMLATWRRRTTPREATLELLGRVLRDMDLLGCLEDIEE
CD95	256	EQKVQLERNWHQLHGKKEAY-DTLIKDIKKANLCTLAEKIQT
Apo2	400	MYLEGNADSALS
DR4	455	IYLEDGTGSAVSLE

Fig. 2

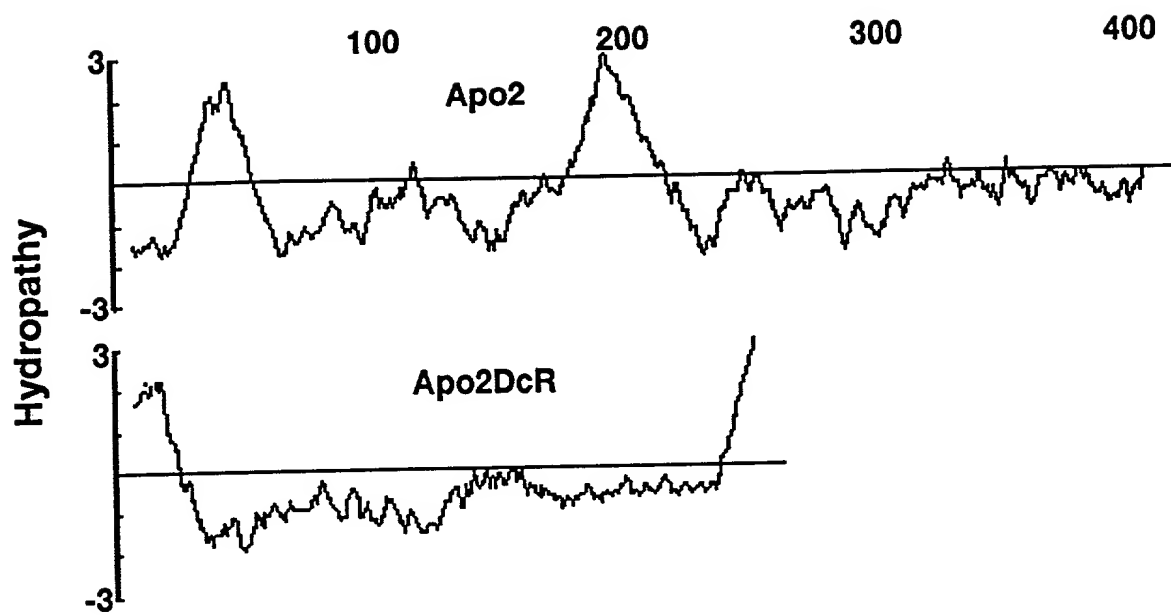


Figure 3

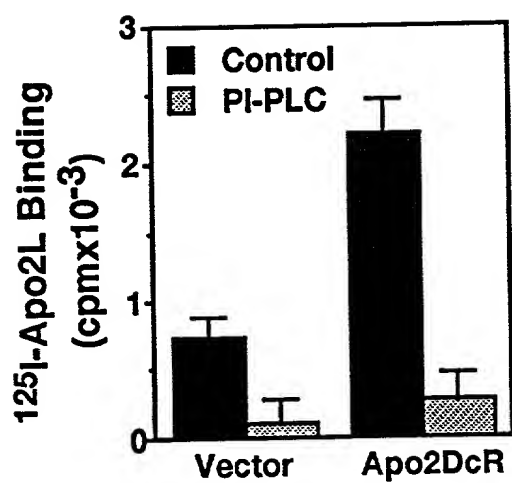


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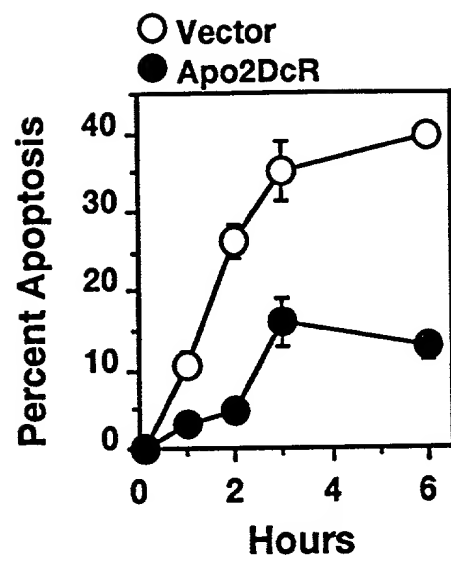


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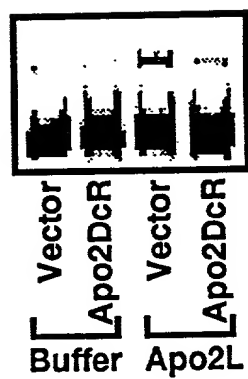


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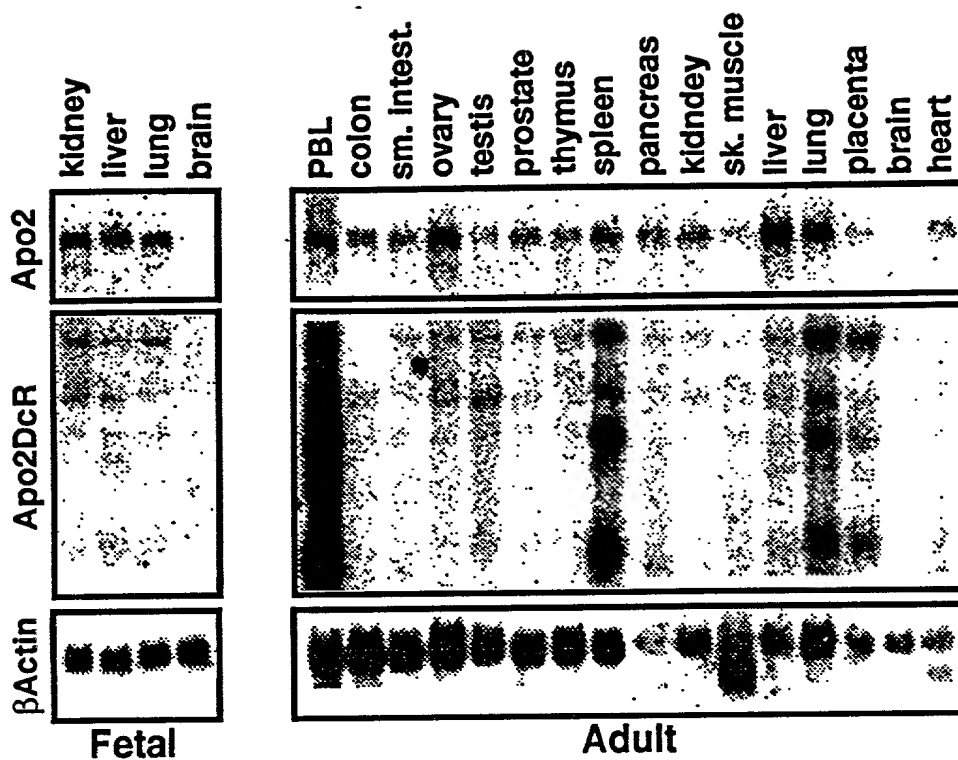


Figure 7

1 CCCACGGCTC CGCATAAATC AGCAGCGCGC CGGAGAACCC CGCAATCTCT GCGCCACAA AATACACCGA CGATGCCCGA TCTACTTTAA GGGCTGAAAC
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101 CCACGGGCGT GAGAGACTAT AAGAGCGTTC CCTACCGCCA TGAACAACG GGGACAGAC GCCCGGGCG CTTGGGGGG CCGGAAAAGG CACGGCCCCAG
 GGTGCCCGGA CTCCTCTGATA TTCTCGCAAG GGATGGCGGT ACCTTGTTG CCTGTCTTG CCGGGCGGGC GAAGCCCCCG GGCCTTTTCC GTGCCGGGTC

201 GACCCAGGGA GGGCGGGGA GCCAGGCCTG GGTCCGGGT CCCAAGACC CTTGTGCTCG TTGTGCGCGC GGTCTGCTG TTGGTCTCAG CTGAGTCTGC
 CTGGGTCCCT CCGGCCCTT CCGTCCGAC CCGAGGCCCA GGGTTCTGG GAACACGAGC AACAGCGCGC CCAGGACGAC AACACAGAGTC GACTCAGACG

22 ProArg1 ualaArgGly AlaArgProG lLeuArgVa lProLysThr LeuValLeu alValAlaAl aValLeuLeu LeuValserA laGluserAla

301 TCTGATCACC CAACAAGACC TAGTCCCCA TAGTCCCCA GCAGAGAGCG GCCCCACAA AAAAGAGGTC CAGCCCCCTCA GAGGGATTGT GTCCACCTGG ACACCATATC
 AGACTAGTGG GTTGTCTTGG ATCAGGGGT CTTCTCTGC CCGGTCTGC CCGGTCTGC GTCGGGGAGT CTCCTTAACA CAGGTGGACC TGTGGTATAG

55 LeuileThr GlnGlnAspL euAlaProG1 nGlnArgAla AlaProGlnG lNlysArgse rSerProser GluGlyLeuC ysProProG1 yHisHisle

401 TCAGAAGACG GTAGAGATTG CATCTCCTGC AAATATGGAC AGGACTATAG CACTCACTGG AATGACCTCC TTTTCTGCTT GCGCTGCACC AGGTGTGATT
 AGTCTTCTGC CATCTCTAAC GTAGAGGACG TTTATACCTG TCCTGATATC GTGAGTGACC TTACTGGAGG AAAAGACGAA CCGCAGCTGG TCCACACTAA

88 SerGluaspG lyArgAspCy sIleSerCys LysTyrglyG lNaspTyrs e rThrHisTrp AsnAspLeuL eupheCysLe uArgCysThr ArgCysAspSer

501 CAGGTGAAGT GGAGCTAAGT CCCTGCACCA CCAGCAGAAA CACAGTGTGT CAGTGCAGG AAGGCACCTT CCGGGAAGAA GATTCTCCTG AGATGTGCCG
 GTCCACTTCA CCTCGATTCA GGGAGTGGT GGTGGTCTTT GTGTACACA GTACAGCTTC TTCCGTGGAA GGCCTTCTT CTAAGAGGAC TCTACACGGC

122 GlyGluVa lGluLeuser ProCysThrT hrThrArgas nThrValCys GlnCysGluG lNlyThrPh eArgGluGlu AspserProG lumetCysArg

601 GAAGTGCCGC ACAGGGTGT CCAGAGGGAT GGTCAAGGTC GGTGATTGTA CACCCTGGAG TGACATCGAA TGTGTCCACA AAGAATCAGG CATCATCATA
 CTTACAGGCG TGTCCACAG GGTCTCCCTA CAGTTCCCA CCACTAACAT GTGGGACCTC ACTGTAGCTT ACACAGGTGT TTCTTAGTCC GTAGTAGTAT

155 LysCysArg ThrGlyCysP roArgGlyMe tValLysVal GlyAspCyst hrProTrpse rAspIleGlu CysValHisL ysGluSerG1 yIleIlelle

701 GGAGTCACAG TTGCAGCCGT AGTCTTGATT GTGGCTGTGT TTGTTTGCAA GTCTTTACTG TGGAAAGAAAG TCCTTCTCTTA CCTGAAAGGC ATCTGCTCAG
 CCTCAGTGT ACCTGCGCA TCAGAACTAA CACCGACACA CACAAACGTT CAGAAATGAC ACCTTCTTTC AGGAAGGAAT GGACTTTCCG TAGACGAGTC

188 GlyValThrV alAlaAlaVa lValleulle ValAlaValP heValCysLy sSerLeuLeu TrpLysLysV alleuProTy rLeuLysGly IleCysSerGly

801 GTGGTGGTGG GGACCCCTGAG CGTGTGGACA GAAGCTCACA ACGACCTGGG GCTGAGGACA ATGTCTCTCAA TGAGATCGTG AGTATCTTGC AGCCCCACCA
 CACCACCAAC CCTGGGACTC GCACACCTGT CTTGAGTGT TGTGGACCC CGACTCCTGT TACAGGAGTT ACTCTAGCAC TCATAGAACG TCGGGTGGGT

222 GlyGlyG1 yAspProGlu ArgValaspA rgSerSerG1 nArgProGly AlaGluAspa snValLeuAs nGluIleVal serIleLeuG lNProThrGln

901 GGTCCCTGAG CAGGAAATGG AAGTCCAGGA GCCAGCAGAG CCAACAGGTG TCAACATGTT GTCCCCCGGG GAGTCAGAGC ATCTGCTGGA ACCGGCAGAA
 CCAGGGACTC GTCTTTTACC TTCAGGTCTT CCGTGTCTC GGTGTCTCAC AGTTGTACAA CAGGGGGCCC CTCAGTCTCG TAGACGACCT TGGCCGTCTT

255 ValProGlu GlnGluMetG luValGlnG1 uProAlaGlu ProThrGlyV alAsnMetLe userProGly GluserGluH isLeuLeuG1 uProAlaGlu

1001 GCTGAAAGGT CTCAGAGGAG GAGGCTGCTG GTTCCAGCAA ATGAAGGTGA TCCCACCTGAG ACTCTGAGAC AGTGCTTCGA TGACTTTGCA GACTTTGGTGC
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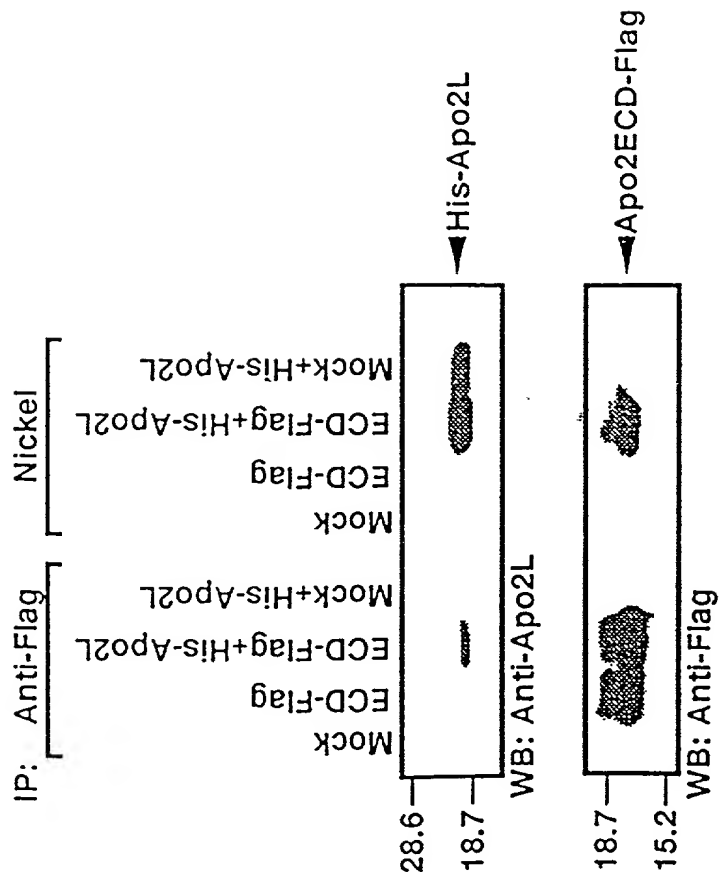
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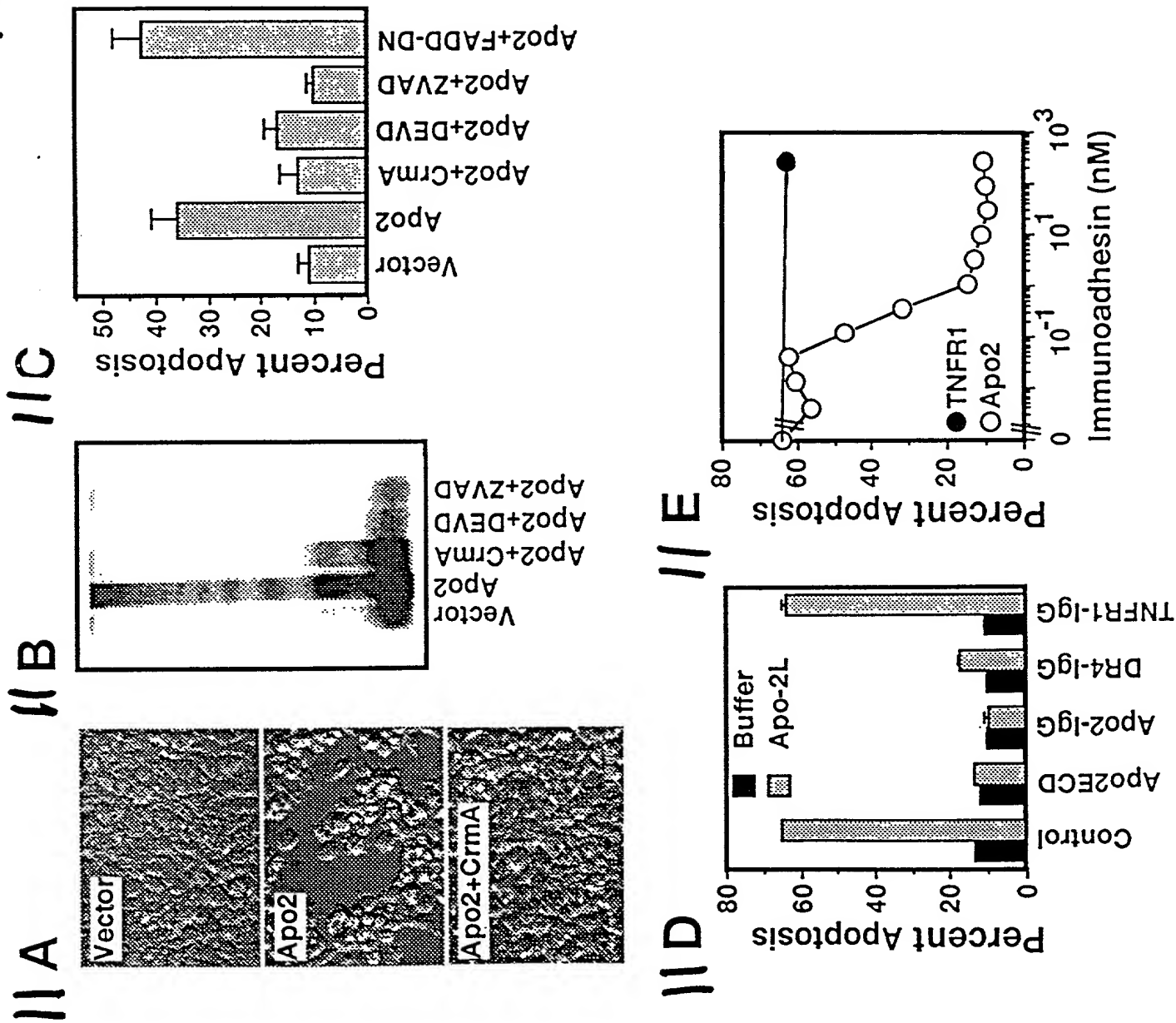
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322 PheAspse rTrpGluPro LeuMetArgL ysLeuGlyLe uMetAspAsn GluileLysV alAlaLysAl aGluAlaAla GlyHisArgA spThrLeuTyx
1201 CACGATGCTG ATAAAGTGGG TCAACAAAAC CGGGCGAGAT GCCTCTGTCC ACACCTTGCT GGATGCCCTG GAGACGCTGG GAGAGAGACT TGCCAAAGCAG
GTGCTACGAC TATTTCACCC AGTTGTTTGG GCCCGCTCTA CGGAGACAGG TGTGGGACGA CCTACGGAAC CTCTGCGACC CTCTCTCTGA ACGTTTCGTC
355 ThrMetLeu ileLysTrpV alAsnLysTh rGlyArgAsp AlaSerValH isThrLeuLe uAspAlaLeu GluThrLeuG lyGluArgLe uAlaLysGln
1301 AAGATTGAGG ACCACTTGTG GAGCTCTGGA AAGTTCACTT ATCTAGAAAG TAATGCAGAC TCTGCCWGTG CCTAAGTGTG ATTCTCTTCA GGAAGTGAGA
TTCTAACTCC TGGTGAACAA CTCGAGACCT TTCAAGTACA TAGATCTTCC ATTACGCTCG AGACGGRAACA GGATTACACAC TAAGAGAAGT CCTTCACTCT
388 LysilleGlua spHisLeuLe userSerGly LysPheMetT yrLeuGluGl yAsnAlaAsp SerAlaXqq S erOC*
1401 CCTTCCCTGG TTTACCTTTT TTCTGGAAAA AAGACCTTTT TCGGGTTGAC GACTCCAGTC AGTAGGAAAG TGCCACAATT GTCACATGAC CCGTACTGGA AGAAACTCTC
GGAAGGGACC AAATGGAAAA AAGACCTTTT TCGGGTTGAC CTGAGGTCAG TCATCCTTTC ACGGTGTTAA CAGTGACTG GCCATGACCT TCTTTGAGAG
1501 CCATCCAAAC TCACCCAGTG GATGGAACAT CCTGTAACTT TTCACTGAC TCCTGCAATT TTTTATAAGC TGAATGTGAT AATAAGGACA CTATGGAAAT
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1601 GTCTGGATCA TTCCGTTTGT GCGTACTTTG AGATTGTTGT TGGGATGTCA TTGTTTTTCAC AGCCTTTTTT TATCCTAATG TAAATGCTTT ATTTATTTAT
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AACCCGATGT AACATTCTAG GTAGATGTTT TTTTTTTTTT TTTTTTTTTT CCGCCGCGCG TGAGATCTCA GCTGGACGTC TTCGAACCGG CCGTACCGG

Fig. 8 (cont.)

FIG. 9

1 MEORGONAPAAAGARKRHGPGPREARGARPGLRVPTLVVVAALLVSAESALITQQD
61 LAPQORAAFPQQRSSPSEGLCPGHHISEDGRDCISCKYGQDYSTHWNDDLFCRLRCTRCD
121 SGEVELSPCTTTRNTVCQCEEGTFREEDSPEMCRKCRGTGCPRGMVKVGDCPTPWSDIQC
181 KESGIIIGVTVAAWVLI VAVFVCKSLIWKKVLPLYLKGICSGGGGDPERVDRSSQRP
241 NVLNEIVSILQPTQVPEQEMEVEQEPAEPTGVNMLSPGESEHLLLEPAEAERSQRRLLVPA
301 NEGDPTETLRQCFDDFADIVPFDWEPLMRKLGMDNEIKVAKAEAAAGHRDLYTMLIKW
361 VNKTGRDASVHTLLDALETGLGERLAKQKIEDHLLSSGKFMYLEGNADSALS





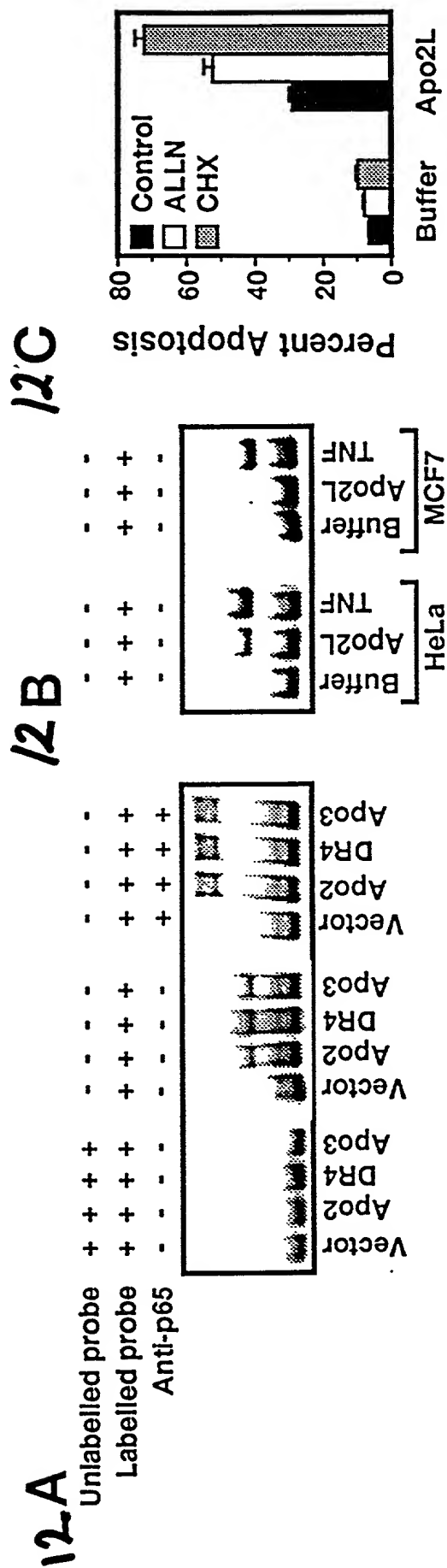


Fig. 12

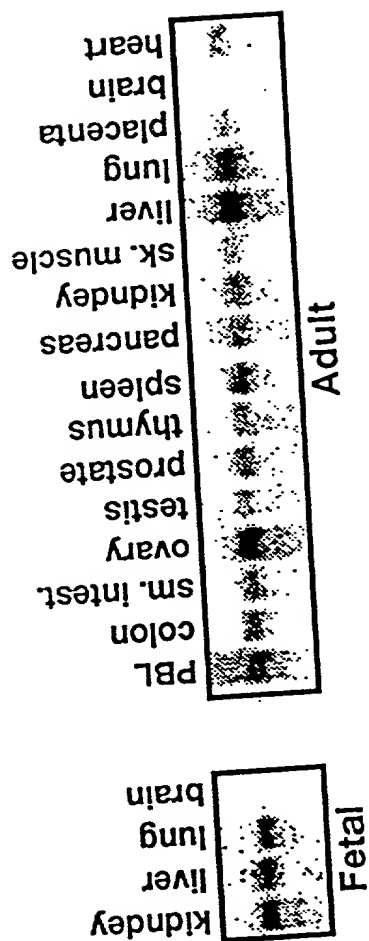


FIG. 13